

BOROUGH OF HOVE.



Annual Report

FOR THE YEAR

1911

ON THE

HEALTH OF THE TOWN

BY

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Medical Officer of Health for Hove,

TOWN HALL, HOVE.

Hove :

EMERY & SON, Ltd, "Gazette" Office, 170/4 Church Road.

Borough of Hove.

STATISTICAL SUMMARY, 1911.

Aspect Facing South and West.

Height above Sea Level...From 190 feet to 22 feet at the
Sea-wall.

Area 1,594·75 acres.

Water Supply... Obtained from Chalk Downs; pure and
well aërated.

Drainage ... Water-carriage system ; modern.

Rateable value £416,019.

Population ... (Census, 1911), 42,173.

Birth-rate ... 15·4.

Death-rate ... 12·9.

Infantile Mortality...101 per 1,000 births.



Borough of Gove.

ANNUAL REPORT

OF THE

Medical Officer of Health

For 1911.

To the Sanitary Committee.

GENTLEMEN,

The Annual Health Report for 1911 differs from those of past years in the arrangement of the various items, in order to follow the scheme suggested by the Medical Officer of the Local Government Board: alterations have also been made in the tables of mortality which are reduced from five to four, by the omission of the old Table II, which gave the statistics for separate localities, viz., the two parishes. Although this table is deleted from those required by the Local Government Board, it will be interesting to continue it in the body of the report in later years: for 1911 all statistics relating to the parishes separately are omitted because the Census returns for these have not yet been received.

The population of the Borough at the Census was **42,173**, considerably less than was estimated : so large an error (over 3,000) in the whole, dissuades me from the attempt to make separate estimates for the two parishes.

It has been necessary to go back over and to correct the estimated populations of the past 10 years, and the rates of births and deaths calculated on these ; the corrected figures now take their place in Table I, the difference from previous calculations showing a yearly increase, until for 1910, the birth and death rates are raised by about 1-14th.

The birth rate for 1911 was **15·4**, higher than in 1910 (15·0).

The death rate was **12·9**, which is slightly below the average : the infantile mortality rate was **101** per 1,000 births—higher than last year, but below the average ; considering the exceptionally hot summer, the infant deaths were fewer than might have been expected.

The following figures given by the Registrar General in his last quarterly report show how Hove stands in relation to the rest of the country :—

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY
DURING THE YEAR 1911.

	Annual Rate per 1,000 living.			Deaths under 1 year to 1,000 births.
	Births.	Deaths.	Deaths from Diarrhœa and Enteritis under 2 years.	
England and Wales	24·4	14·6	1·06	130
Great Towns	25·6	16·4	1·31	140
Smaller Towns... ..	23·4	14·4	1·14	133
England & Wales less Towns	23·4	13·1	0·77	118
Hove	15·4	12·9	0·49	101

During 1911 some important regulations have been made by the Local Government Board in respect of Public Health matters.

In March was issued an order requiring **Notification of Tuberculosis in Hospitals**—by which medical officers of hospitals were required to report to the Medical Officer of Health all persons attending the hospital, either as in or out patients, who were found to be suffering from Pulmonary Tuberculosis.

In November, **all** medical practitioners were required to notify (after January 1st) all persons attended by them, so suffering.

In May, the Board required Medical Officers of Health to report weekly to them and to the County Medical Officer of Health the number of fresh cases of Tuberculosis notified.

By these regulations it is hoped that each local Medical Officer of Health will become aware of the extent of Consumption in his district, that each County Medical Officer of Health will know the distribution of the disease throughout his county: and the Local Government Board will have similar information for the whole of England and Wales.

Certain powers and duties are given to the Local Authorities in respect of persons suffering from Tuberculosis, but at the present moment the chief thing to emphasize to the medical profession and the public is that the notifications made to the Medical Officer of Health are confidential: and that there will be no interference with or annoyance to the persons reported to him.

In August a circular was issued on the **Prevalence of Epidemic Diarrhoea in Children**—calling attention to the need for special measures of prevention in the hot weather.

In September, the Board sent a memorandum “**On the investigation of outbreaks of illness suspected to be due to food poisoning,**” giving suggestions as to the methods required and the need for bacteriological and chemical investigation of suspected foods.

An enquiry was held in February by one of the Board's Medical Officers into the general sanitary administration of the Borough, going into the detailed working of the sanitary department: a large mass of statistics was asked for and supplied. As no more has been heard from the Board concerning these, we may conclude that our methods were found satisfactory.

SANITARY CIRCUMSTANCES.

Water Supply.—The Town is supplied by the Brighton Corporation with water from deep borings in the chalk. The character of the water has been satisfactory at all times, and even in the dry season the quantity allowed was not limited.

All the houses have a constant supply.

Sewerage, Closets, etc.—The whole Borough is now drained in all parts on the water-carriage system. The Main Intercepting Sewer joins that of Brighton, which discharges into the sea, five miles to the East. All houses are supplied with water-closets, there has been therefore no need to put into use sections 39—42 of the Public Health Acts Amendment Act, 1907, which is in force in the Borough.

House Refuse.—The system is the same as in former years ; and the removal is carried out by a Contractor, who deposits the refuse on a spot well away from the inhabited part of the Borough. The contract provides for the removal of house refuse twice a week from June to September, and once a week during the remainder of the year. The removal has been performed satisfactorily, except that on some days in November and December, when there was very heavy rain, the dustmen could not make the collection regularly.

The heaps where the old refuse is deposited have been a source of some anxiety, requiring frequent inspection to prevent nuisance ; not only is there less demand for the ashes than was the case years ago, with the result that the heaps grow larger and larger—this would be merely an eyesore—but the character of the refuse removed from the Town contains less ashes and more organic matter each year, and the disposal of it without nuisance becomes increasingly difficult.

This was especially the case during the months of July, August and September : by the use of carbolic fluid sprayed over the recently tipped refuse, obnoxious smells were prevented ; but the disinfectant did not prevent the heap serving as a breeding place

for flies, which, as I mention elsewhere in this Report, proved a great annoyance in the western parts of the Borough, and may reasonably be suspected of having carried the infection of Epidemic Diarrhœa from house to house.

After the experience of 1911, I feel that the time has come when the disposal of our house refuse by simple deposition can no longer be considered satisfactory ; and that other arrangements should be made.

The quantity of refuse removed from the Borough to the Dust Tip, Old Shoreham Road, Aldrington, during each month was as follows :—

January ..	1346 Loads	July ..	..	1274 Loads
February ..	1147 „	August ..	..	1291 „
March ..	1369 „	September ..	..	1265 „
April ..	1245 „	October ..	..	1227 „
May ..	1373 „	November ..	..	1227 „
June ..	1282 „	December ..	..	1295 „

The total number of loads removed during the year amounted to 15,341 ; as compared with 14,427 during the previous year.

Sanitary Inspection of District.—The Statement of the Inspector of Nuisances which follows, shows the inspections made and visits paid for different reasons, and the work carried out under the supervision of the Sanitary Department. The houses visited were more by half than last year ; partly because less time was occupied over infectious disease.

The drains wholly reconstructed are fewer almost every year : this being the result of steady inspection in past years.

The chief increase in 1911 was in small defects in drainage apparatus, and in disconnection of rain water pipes from drains.

The visits paid to houses for one object or another amounted in all to 8,186, an average of 27 per diem. It was not necessary to take legal proceedings in any case.

ANNUAL STATEMENT

Prepared by Mr. H. HERRIOTT, Chief Sanitary Inspector.

Statistics of Inspections, Nuisances, etc.

Number of premises visited on house to house inspection..	1731
„ complaints attended to	1012
„ houses inspected from complaints received ..	302
„ premises inspected after complaints, and no nuisance found	86
„ visits in respect of illness	225
„ visits to disinfect rooms	314
„ visits for removal of bedding	228
„ visits for sundry purposes.. .. .	1874
„ re-visits to premises	3512
„ complaints referred to the Surveyor	18
„ preliminary and verbal notices issued for the abatement of nuisances.. .. .	869
„ statutory notices issued	153
„ visits to dairies, cowsheds and milkshops ..	187
„ visits to provision shops	1300
„ visits to dust-tip	42
„ smoke observations	23

The undermentioned works have been carried out during the year ; being the result of notices issued :—

Number of drains reconstructed during the year (total) ..	26
„ drains defective and unventilated ; reconstructed and ventilated	3
„ drains insufficiently ventilated ; provided with 4-inch pipes	9
„ drains repaired, defective traps removed, and proper traps substituted	225
„ choked drains cleared and cleansed	54
„ defective soil pipes and ventilating pipes repaired	65
„ soil-pipes found inside the house, and defective ; placed outside the house and properly ventilated	1

Number of rain-water pipes and guttering defective or connected to drain or soil-pipe, with upper ends opening near windows; repaired or disconnected, and made to discharge over properly trapped gullies.. .. .	187
„ defective water closets repaired, cleansed, or other apparatus provided	146
„ closets with defective water supply remedied ..	115
„ container water closets abolished.. .. .	1
„ premises with insufficient sanitary conveniences; additional conveniences provided	4
„ premises with sanitary conveniences insufficiently screened	1
„ defective sinks repaired or replaced by new glazed stoneware sinks	22
„ defective waste pipes and traps remedied	65
„ drinking water supplies disconnected from cisterns	1
„ houses with water supply cut off; water supply laid on	1
„ yards, areas and wash-houses re-paved or repaired	54
„ yards and areas cleansed	21
„ houses overcrowded; overcrowding abated ..	46
„ rooms cleansed and whitewashed.. .. .	467
„ rooms insufficiently ventilated or lighted ..	13
„ premises having defective wooden flooring, or the air space under floors insufficiently or not ventilated, and defective staircases remedied	21
„ defective roofs and walls remedied	39
„ insufficient ashpits and dustbins remedied ..	139
„ manure pits abolished	2
„ accumulations of manure and other refuse removed	48
„ cesspools emptied	1
„ cesspools abolished.. .. .	1
„ animal nuisances abated	14
„ smoke nuisances abated	3

Elementary Schools.—The relations between the Education and Sanitary Offices remain cordial : frequent interchange of information has taken place in respect of infectious diseases, notifiable and non-notifiable, and of houses or children found dirty. The Medical Officer of Health visits absentees when the nature of the illness suggests infectious disease, and reports to the school medical officer.

The work of the school officers in regard to verminous heads has produced results which are obvious, and not least so among the children admitted to the Borough Sanatorium.

At the beginning of 1911 Measles was epidemic, and cases continued until April, with a few in May; by this time, too, Whooping Cough had almost disappeared ; the last absence from this cause being on July 19th. These two diseases present a strong contrast in their behaviour among scholars : Measles appeared in November, 1910, spread rapidly through all the schools, and was gone in six months after it began : Whooping Cough has been prevalent for the last three years, cases being most numerous in the summer holidays of 1910, showing little tendency to spread between then and November, when more cases occurred, fresh ones continuing through the Christmas holiday : but when school recommenced the cases decreased so much that only eleven small batches occurred among scholars from February to July.

This is clear evidence that Whooping Cough spreads more through home association than through the school, and that it is useless to close a school in an urban district in the hope of checking its spread.

When the epidemic of Measles was over, I wrote a report on it, which was sent to the Education Authority in April : this report advocated an effort being made to prevent the spread of Measles in the Town in future by taking immediate action when the first case was known, and advised that a record of the scholars who had had Measles should be kept. This was discussed in my last Annual Report.

Chicken Pox claims occasional victims every year : in March there were 13 cases in three days at one school, followed by 8 more two weeks later : after the Easter holidays cases occurred in other schools, and more in June.

An overlooked case sometimes starts a few others, but there is never anything like an epidemic, probably because nearly all the scholars have had it before reaching school age.

Mumps has been reported several times; chiefly in January, February and March at Ellen Street School, but rarely during the rest of the year.

At the end of the year, the schools are remarkably free from epidemic disease of all kinds.

Milk and other foods.—Frequent inspections have been made of milk shops and dairies, provision shops, butchers' premises, etc., and as usual very little has been found to find fault with.

There was no seizure of meat or other food.

No samples of milk have been examined for Tubercle in 1911.

Sale of Food and Drugs Acts.—The samples analysed numbered 160, viz :—

New Milk..	..	82	Whisky	..	..	5
Butter	..	37	Brandy	..	..	3
Lard	..	10	Gin	..	..	2
Margarine..	..	7	White Pepper	..	..	3
Coffee	..	6	Ground Ginger	..	..	2
Malt Vinegar	..	3				

The only samples returned as "adulterated" were 9 of milk : 2 were slightly deficient in fat ; the other 7, taken in the hot weather, though rich in fat (over 4%) were deficient in other solids : this can hardly be called "adulteration."

Artificial colouring matter was found in 75 per cent of the samples of milk. The analyst called attention in his second and third quarterly reports to the large percentage of water in the butter samples, the average being 13.23 and 13.34 : none exceeded 16 per cent.

No legal proceedings were taken in any case : the vendors of deficient milks were cautioned.

Housing.—The systematic inspection of houses has been carried out as in past years, the details being given in the Annual Statement of the Inspector of Nuisances.

No house has been condemned as unfit for habitation : there are abundant and adequate houses in the district, but rents are high, and to this may be attributed what overcrowding exists.

The supervision of new houses is under the Borough Surveyor.

NEW HOUSES ERECTED, 1911.

Year.	Total.	Hove Parish.	Aldrington Parish.
1902	227	96	131
1903	179	57	122
1904	155	82	73
1905	171	78	93
1906	182	64	118
1907	178	68	110
1908	128	39	89
1909	71	28	43
1910	107	49	58
1911	134	75	59

• FACTORIES AND WORKSHOPS.

The returns on the Form required for the Home Office has been completely revised, with the result that the number of workshops has been increased by the addition of domestic workshops and laundries, all of which are registered and inspected regularly: several of these domestic workshops and premises where homework is done are visited in the course of systematic house inspection ; such visits have not been counted among the work done under the Factory Acts. The defects found have not been of a serious nature, nor has it been necessary to take any legal action to secure the enforcement of notices.

Factories, Workshops, Workplaces and Home Work.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY INSPECTORS OF NUISANCES.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories (Including Factory Laundries).	97	4	Nil
Workshops (Including Workshop Laundries)	691	61	„
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	59	9	„
Total	847	74	Nil

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. (1)	Number of Defects.		Referred to H.M. Inspector (4)	Number of Prosecu- tions. (5)
	Found. (2)	Remedied. (3)		
<i>Nuisances under the Public Health Acts ;—*</i>				
Want of Cleanliness	52	52		
Want of Ventilation	—	—		
Overcrowding	3	3		
Want of Drainage of Floors ...	—	—		
Other Nuisances	59	59		
†Sanitary { insufficient	1	1		
accommo- { unsuitable or defective	20	20		
dation { not separate for sexes	2	2		
			Nil.	Nil.
<i>Offences under the Factory and Work- shop Act :—</i>				
Illegal occupation of under- ground bakehouse (s. 101) ...	} Nil			
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100)				
Other Offences (Excluding offences relating to outwork which are in- cluded in Part 3 of this Report).	1	1		
Total	137	137		

* Including those specified in Sections 2, 3, 7 and 8 of the Factory Act as remediable under the Public Health Acts.

† Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the Hove Council; the standard of sufficiency and suitability of sanitary convenience accommodation for factories and workshops is determined by the Sanitary Accommodation Order of 1902.

3.—HOME WORK.

NATURE OF WORK.*	OUTWORKERS' LISTS, SECTION 107.										OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES SECTIONS 109, 110.		
	Lists received from Employers.						Prosecutions.				Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110).	Prosecutions (Sections 109, 110)
	Twice in the year.		Once in the year.				Occupiers as to keeping or sending lists.	Failing to keep or permit inspection of lists.	Failing to send lists.							
	+ Lists (2)	Outwrkrs +		Lists (5)	Outworkers											
		Con- trctrs (3)	Wrk- men (4)		Con- trctrs (6)	Wrk- men (7)										
(1)	42	9	146	2	3	1										
Wearing Apparel—	6	11	3	—	—	—										
(1) making, etc. ...	2	8	—	—	—	—										
(2) cleaning and washing ...	—	2	—	—	—	—										
Furniture and Upholstery ...	—	2	—	—	—	—										
Cart Gear, etc. ...	—	2	—	—	—	—										
Locks, Latches and Keys ...	—	2	—	—	—	—										
Umbrellas, etc. ...	—	—	—	—	—	19										
Stuffed Toys ...	2	1	2	1	—	—										
Basket Making ...	52	35	151	3	3	20										
Total ...	...	...	...	...	...	...				

* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class *only*, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

+ The figures required in columns 2, 3 and 4 are the *total* number of the lists received from those employers who comply strictly with the statutory duty of sending *two* lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be *even* numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name will often be repeated.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Workshops	234
Domestic Workshops	238
Workshop Laundries	39
Domestic Laundries	16
Workshop Bakehouses	25
Total number of workshops on Register	552

5.—OTHER MATTERS.

Class. (1)	Number. (2)
Matters notified to H.M. Inspectors of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	29
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) ...	3
Notified by H.M. Inspector .. Reports (of action taken) sent to H.M. Inspector	3
Other	Nil
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	Nil
In use at the end of the year	16

SANITARY ADMINISTRATION.

Hospital Administration.—Provision is made in the Borough Sanatorium for persons suffering with Scarlet Fever, Diphtheria or Enteric Fever : occasionally cases of Erysipelas and of Measles are admitted if the home circumstances are bad, and there is room in the hospital.

A new ward-block was begun in December, which is arranged in two parts, each with two wards separated from one another, so that it can be used for different diseases, or for private patients, such as pupils of private schools : two wards contain 2 beds, and two contain 4 : with this addition, the number of beds, allowing 2,000 cubic feet per patient, will be, in permanent buildings, 40 ; in temporary iron building, 15. This ought to be sufficient to deal with any epidemic.

Small Pox is no longer treated on this same site ; but persons so suffering will be admitted to the hospital of the Brighton Corporation at Fulking Grange.

No provision has been made for treating cases of Pulmonary Tuberculosis in hospital ; but the Sanitary Committee has agreed to admit patients to the Borough Sanatorium under special circumstances.

The Guardians of the Steyning Union, in which Hove is included, have erected at the Infirmary two shelters with 6 beds each, for the open air treatment of Tuberculosis : these, when ready, should prove a valuable help in the treatment of this disease among Hove persons.

The number of patients treated in the Borough Sanatorium during 1911 has been smaller than for many years : the average number per diem being 9.

TABLE SHOWING PATIENTS TREATED DURING 1911.

Disease.	In Hospital, Jan. 1st.	Admitted.	Died.	Discharged.	Remaining Dec. 31st.
Scarlet Fever...	5	52	1	47	9
Diphtheria ...	—	23	2	19	2
Enteric Fever..	1	4	1	3	1
Measles and German Measles	—	8	—	7	1
Other Diseases	1	7	1	7	—
Totals .	7	94	5	83	13

Local Acts.—None of these has any special relation to Public Health.

Adoptive Acts.—Those in force in Hove are the—

Infectious Disease Prevention Act.

Public Health Acts Amendment Act, 1890 Part III (adopted 1891).

Public Health Acts Amendment Act, 1907, Part III (except sect. 48 and 50 ; and Part IV (came into force October, 1909).

Notification of Births Act (came into force 1908).

Bacteriological Laboratory.—The following specimens were examined during 1911 :—

FOR DIPHTHERIA.

Sent by medical practitioners for diagnosis	80
From patients nursed at home before disinfection ..	24
From patients on admission to the Sanatorium ..	20
From patients in the Sanatorium before discharge ..	61
From Scarlet Fever patients in the Sanatorium ..	56
From persons associated with Diphtheria patients ..	63

FOR ENTERIC FEVER.

Blood for diagnosis	14
Urine during convalescence	2

FOR PHTHISIS.

Sputum found to contain Tubercle	13
Sputum found not to contain Tubercle	59
Other specimens	2
Total	394

Disinfection.—The work in this direction has not been so heavy as in recent years as there have been fewer cases of infectious disease notified. On the other hand there is an increasing demand for official disinfection after other illnesses, and this is done by the assistant inspectors for a payment which covers the cost. Some

work has been done also for neighbouring districts, as is shown below :—

1911. Hove Borough.	Rooms Disinfected.	Houses from which bedding, etc., was removed.
After notifiable infectious disease	121	94
After Phthisis	67	39
After other diseases	194	95
Total	382	228

	For Hove.	For other districts	Total.
Number of journeys with disinfecting vans ...	248	24	272
Number of articles disinfected	4,596	229	4,825
Number of articles destroyed	355	—	355

INFECTIOUS DISEASES.

The cases of notifiable disease have been few ; those of Scarlet Fever and Diphtheria being about the average of non-epidemic years. Whooping Cough was prevalent in the early months, and caused nine deaths ; Measles was almost over in 1910, but 3 deaths from it occurred in 1911.

NOTIFICATIONS OF INFECTIOUS DISEASE IN PAST YEARS.

Year.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Small Pox.	Puerperal Fever.	Continued Fever.
1898	80	233	22	25	—	1	—
1899	278	245	32	9	—	—	—
1900	173	71	27	23	—	1	—
1901	115	148	30	15	3	2	—
1902	51	52	25	21	—	1	—
1903	27	36	8	5	1	—	—
1904	38	39	9	11	—	—	—
1905	49	35	11	18	—	—	—
1906	38	27	15	9	—	1	—
1907	56	36	8	14	—	2	—
1908	254	23	5	12	—	3	—
1909	200	62	6	11	—	1	1
1910	93	40	4	9	—	2	—
1911	64	27	7	17	1	3	—

Scarlet Fever and Diphtheria.—There is nothing fresh to be said about the cases of either of these diseases, which have not presented any unusual features.

Enteric Fever.—Seven cases were notified, of which one proved to be not Enteric : 2 were ill before they came to Hove ; 4 only originated in Hove. Three of these had eaten raw oysters at about the time when infection must have occurred ; the fourth was a sorter at a laundry, a position which is one of danger from overlooked cases of infection.

Small Pox.—The illness was contracted abroad, and developed after the patient returned home. No further cases occurred.

Puerperal Fever.—These were all slight and none died.

The non-notifiable diseases are chiefly known as they affect schools, and have been referred to under that subject.

STATE OF HOUSES EXAMINED ON ACCOUNT OF INFECTIOUS DISEASE.

Disease.	Houses examined.	With grave defects of Drainage.	With slight defects of Drainage.	Dirty or Overcrowded.	Good.
Scarlet Fever	48	1	4	1	43
Diphtheria...	23	2	3	1	17
Enteric Fever	5	—	1	—	4
Erysipelas ...	15	—	—	—	15
Puerperal Fever...	1	—	—	—	—
Totals ...	92	4	8	2	79

Tuberculosis.—Information about persons suffering from Pulmonary Tuberculosis was obtained in several ways ; partly under official regulations, and partly by voluntary arrangements :—

34 fresh cases were reported, viz. :—

By private medical attendant (voluntarily)	13
By medical officers of hospitals (voluntarily)	5
By medical officers of hospitals (under regulations) ..	9
By District Medical Officer	1
On leaving Union Infirmary	3
By Health Visitor	2
In other ways	3
Total (including 1 re-notification)	35

Under the new **hospital regulations** which came into force on May 21, certificates were received : of these 2 were transferred to other districts at once, 2 were found to have moved to other districts within a few days, 8 were previously known and 9 were added to the list of Hove cases.

Under the **Poor law regulations**, 10 certificates were received, 5 on admission to the Infirmary, 3 on discharge (two of the five admitted) ; 2 by the District Medical Officer : all but 4 had been notified already.

The cases heard of were visited, and advised what precautions were necessary : the Committee started by the Mayor (Alderman Captain Fraser) in 1909 paid part of the cost of four patients at Mount Vernon Hospital : and some help was given to patients remaining at home, and on their return from Sanatoriums : this means of help is no longer available, as the money collected for the purpose of open air treatment is spent.

The new regulations requiring the notification of all cases of Pulmonary Tuberculosis by their medical attendants after January 1st were issued by the Local Government Board in November : and you have been since then considering the whole question afresh with a view to taking more definite action than has been the case hitherto.

NOTIFICATION OF BIRTHS ACT.

This Act has now been in force for $3\frac{1}{2}$ years, and the methods of work arranged at first have been found to answer well : in only one way has the work been other than was anticipated, and this is the result of its success, viz., the time occupied by the Health Visitor is nearly double that which was estimated, about six hours daily being spent in visiting, besides from half to one hour in making notes of visits. Many inquiries have been received from other districts about our methods, and especially in reference to the dinners which are given in connection therewith : for this reason I have repeated what was said about the dinners in my last report.

The statistics for 1911 are—

Registered Births	643
Births notified.. ..	545 (84·7 per cent.)
Visited by Health Visitor ..	363
Left Hove in course of year..	27
Came to Hove, added to visit- ing list	10
Total visits	2,923
Still births notified	19

The progress of babies born in 1909 and 1910 is referred to under the subject of Infantile Mortality at a later page.

Illnesses during 1911.—Whooping Cough, with its complications of Bronchitis and Pneumonia, and Measles were very common among infants in January and February: but there was no epidemic in the rest of the year except Summer Diarrhœa, which is discussed later.

Feeding Methods.—There is little fresh to say on this subject; the dry, hot summer tested severely the accepted doctrine that breast-fed children are free from epidemic diarrhœa: the exception certainly served to prove the rule, for though several breast-fed children suffered in this way, their attacks were invariably mild, and not one died. In some cases dried milk was used with such benefit that its wider use in hot weather may safely be advised.

The percentage of breast-fed children appears to have been less in 1911 than in the two years before, but accurate comparison is difficult: if this was the case, it was due in all probability to the greater number of mothers going out to work, while the fathers remained at home: some kinds of work, and notably laundry work, in which many women are employed here, seem to lessen the mother's power to nurse the children.

Deaths of Infants.—Of the 66 Hove infants who died in 1911, 38 were on the Health Visitor's list, and all of these had proper attention and medical advice during their illness: this is one of the many

ways in which the Health Visitor is useful, viz., in urging parents to get medical attention when it is necessary, and in giving hospital letters when these cannot be obtained otherwise.

Of the 28 who were not visited by her, 10 survived their birth less than 1 week : 11 were in good circumstances, 3 were under the care of hospitals ; 3 born elsewhere and 1 not notified under the Act, were not heard of until after death.

Dinners for Nursing Mothers.—After the first six months' experience of the work in connection with the notification of Births Act, it was evident that in some instances it was of little use for the nurse to visit and advise breast-feeding unless some plan was arrived at for providing the mothers with sufficient food. With this object a Fund for Mothers and Babies was started in February, 1909, by Councillor H. H. Taylor, F.R.C.S., and has been continued by him since.

It is not necessary or advisable to assist all poor mothers in this way : only special cases, such as those who have been unable to feed their previous children, or whose children are rickety, or who, through want of means, are unlikely to continue breast-feeding satisfactorily, are supplied with a dinner every day for as long as seems serviceable.

Those who are considered suitable by the Health Visitor, and are approved by the Medical Officer of Health, are given tickets for one of two restaurants, where dinners must be eaten. No charge is made to the mothers : the cost is 4d. per meal.

During 1911 tickets were given to 38 mothers, who had 3,341 dinners, the numbers varying from 24 to 178 : excluding 7 who are continuing in 1912, there were 6 who had less than 50 dinners, 5 between 50 and 100, and 20 who had over 100 dinners. In two instances dinners were given before the baby's birth where there seemed urgent need ; but this is not usually done.

The shorter periods for which dinners have been given (3 to 6 weeks) generally denote periods of family trouble, ill health of the father, or temporary loss of work : these are not the least useful, for, at little cost, they tide over a time of danger to the child after which all may go smoothly again.

Sometimes, however, when dinners are given for short periods, they have failed to produce the hoped for results, and bottle feeding is called for : the most successful have been some of those who have continued for several months.

VITAL STATISTICS.

Population.—The Census of 1911 showed that the estimated population of Hove was too high by nearly 3,000 : the actual figures for April 2nd being **42,173**. No further details being yet published, I am only able to consider the population of the Borough as a whole, and to compare it with past decades.

Hove and Aldrington—Census Returns.

1861	..	9,624	1891	..	28,335
1871	..	11,248	1901	..	36,535
1881	..	20,959	1911	..	42,173

The most rapid increase was between 1871 and 1881 : since then the rate of increase has declined in each decade. The estimated population for the middle of 1911 is **42,324**, and upon this the rates per thousand are calculated.

Births.—The registered births were 643 : by the new arrangement of the Registrar General, Hove is credited with 10 births which occurred outside the district (the parents being usually resident in Hove), viz., 8 in the Union Infirmary and 2 in other districts.

The total births are **653**, of which 326 were boys and 327 girls. This gives a birth rate of **15·4** per 1,000 residents, which is higher than that of 1910, and the same as 1909, and 1908. The rate for England and Wales was 24·4.

The illegitimate births numbered 35, and formed 5·4 per cent. of all births.

Deaths.—Fresh arrangements were made last year by the Registrar General for the transference of certain deaths from one district to another : the object being to assign to each district the deaths of those persons which belong to it. Previously this was done only for Public Institutions, while deaths occurring in boarding houses, nursing homes, etc., had to be counted to the district in which death occurred. I have always felt that Hove has suffered by the old method, and it has been my custom in recent annual reports to state the number of visitors who died here ; under the new method the deaths of persons who have a fixed or usual residence elsewhere are transferred to those districts. This is very satisfactory as far as Hove is concerned, and does away with the need for any special mention of visitors : in 1911, however, it seems not to have been worked so perfectly as could be wished, for I find that only 33 deaths have been transferred from Hove elsewhere by the Registrar General, while following his directions, I exclude 52.

These were—

Excluded by M.O.H.			Transferred by R.G.		
In nursing homes	..	29	..	17	
In private or lodging houses		16	..	12	
Deaths by violence (drown-					
ing, etc.)	..	7	..	4	
		<hr/>		<hr/>	
		52	..	33	
		<hr/>		<hr/>	

The difference is largely due to several omissions in the first quarter : all those in private or lodging houses, which are the most difficult to decide, are the same in both lists for the last three quarters.

The deaths at St. Joseph's House are not omitted this year, as they cannot be transferred to any other district ; this is our largest institution, with a population of about 100, of whom 10 die on an average each year, being mostly old persons. This makes only a slight error, and a fairly constant one.

In order to get an absolutely correct idea of the health of Hove, as judged by the death rate, we should want to know—

- (1) The regular resident population.
- (2) The population of visitors and occasional residents.
- (3) The deaths among each of these two groups.

But the second requirement is unobtainable, and would be unreliable for any length of time, even if once ascertained.

Although there may always be a feeling that the recorded Hove death rate is higher than it should appear, on account of those of temporary residents: yet, as long as some uniform method is followed, the comparison of year with year will be a fair one, and this is the chief end to be attained.

In order to make this comparison at once, with past years, I have in Table I, column 8, added for some past years the deaths which, under the new rules, would have been placed there.

The registered deaths in 1911 were 510, those transferred from other districts were 88; those excluded as non-residents were 52. This gives a net total of **546** (males **241**, females **305**): equal to a **death rate of 12·9** per thousand residents. This is lower than the average rate of the previous 10 years (13·25).

The deaths of Hove persons in other districts were these:—

In the Steyning Union Infirmary	..	..	..	33
„ Brighton Union Infirmary	..	..	..	1
„ Royal Sussex County Hospital, Brighton	..	..	..	18
„ Royal Alexandra Hospital, Brighton	..	..	..	4
„ County Asylum, Hellingly	..	..	..	9
„ Hove Borough Sanatorium	..	..	..	4
„ Hospital for Women, Brighton	..	..	..	1
„ Throat and Ear Hospital, Brighton	..	..	..	1
„ other districts	..	..	..	17
				—
				88
				—

The chief groups which are interesting to follow year by year are the deaths from infectious disease, Diarrhœa and Enteritis, Tuberculosis and those of Infants and old persons.

Deaths from Infectious Disease.—These were Measles 3, Whooping Cough 9, Diphtheria 3, Influenza 8.

It is a matter of congratulation that there was no death from Enteric Fever, nor from Scarlet Fever.

Deaths from Diarrhœa (including Enteritis).—The exceptionally hot summer was the cause of a great deal of Epidemic Diarrhœa which proved especially fatal among infants: of 28 deaths attributed to this disease, 21 were of infants under one year of age, 2 just over 1 year and 4 of persons over 65.

The relation between hot weather and this disease was discussed in my last annual report under the notification of Births Act: this year on taking up the subject again, after a wider enquiry, I have thought it better to consider it in this place, and to carry over the consideration of it into the larger matter of infantile mortality generally.

Diarrhœa is one of the most fatal diseases of infancy, though it should be one of the most preventible: after being less frequent through several cool, wet summers, it has in 1911 been most prevalent. It is pre-eminently a disease which demands to be prevented rather than cured, for once it has attacked a child, it too often happens that the most skilled medical treatment fails to save life.

I find that in Hove during the last ten years Diarrhœa (with Enteritis) has caused 181 deaths under 1 year of age, and 24 between the ages of 1 and 5 years; the numbers varying a good deal in different years.

Deaths from Diarrhœa and Enteritis.

		Under 1 year.		Between 1 and 5 years.		Total.
1902	..	25	..	6	..	31
1903	..	12	..	6	..	18
1904	..	31	..	2	..	33
1905	..	28	..	2	..	30
1906	..	21	..	2	..	23
1907	..	10	..	0	..	10
1908	..	11	..	0	..	11
1909	..	10	..	0	..	10
1910	..	12	..	3	..	15
1911	..	21	..	3	..	24
		<hr/> 181		<hr/> 24		<hr/> 205

In these years the deaths from Diarrhœa formed 25 per cent. of all deaths under 1 year : and 9·2 per cent. of deaths between 1 and 5 years.

With a view to getting a true idea of how this disease affects Hove, I have studied the Registrar's returns of deaths for each year back to 1890, which is as far as I am able to go.

In addition to the deaths for 22 years, there is the information collected by the Health Visitor for 3 years, and this is the more valuable inasmuch as it relates not only to deaths but to cases of Diarrhœa among infants.

The deaths have been compared street by street in those years, and although the numbers are few in some years, they serve as an indication of the amount and distribution of the disease, or at least of the most severe cases.

In studying these records two facts have struck me as noteworthy (1) that in following the deaths year by year, there are several *houses* which appear more than once or twice, sometimes in successive years, sometimes missing years and then recurring. (2) that the *streets* chiefly affected are not the same year after year, but in some years one district has most deaths, and in other years this district is almost free.

Examining the first fact more closely, I find that when the same house reappears, it is not always the same family who reside there, though this is often the case.

The question naturally arises whether there is anything wrong with such houses, faults of drainage, etc. : or whether the illness depends on the fault of the occupants entirely.

In a report on Infantile Mortality which I made in 1903, this was referred to, and it was then stated that no association could be traced between defects of drainage and Diarrhœa.

Since then many drains have been relaid, and nearly all in the districts where Diarrhœa is most common have been tested ; the opinion previously expressed can be most fully confirmed that Diarrhœa does not depend—in Hove—on defects of drainage : its occurrence in newly erected houses is confirmatory of this. The second fact, viz., the different street incidence in successive years, was also referred to in 1903, and has become more evident since, especially in the last three years, when the cases of illness have been recorded : the distribution of cases in certain districts were as follows :—

DISTRICT.	1909.	1910.	1911.
Between Conway Street and Goldstone Street, east of Sackville Road	23	26	25
Between Shakespeare Street and Cowper Street, west of Sackville Road	7	12	17
Between Westbourne Street and Tamworth Road	5	7	10
On the Stoneham Estate	9	5	26
Grange Road and Bolsover Road	1	2	7
	—	—	—
	45	52	85
	—	—	—

In 1911 there appears to have been no more Diarrhœa in the area east of Sackville Road than in the two previous years : but much more in the districts west of Tamworth Road.

This variation in different years suggests some influence affecting certain areas adversely in some years, either external, such as deficient scavenging, bad roads, damp houses : or internal, that is infection, which, once introduced, has spread in the immediate neighbourhood.

There seems to be no external influence to affect one district more than another: scavenging has been equally good in all: the roads and yards are all properly paved, refuse is regularly removed and there have been no accumulations of manure: the class of house is much the same, what differences there are remain from year to year. The question of infection has proved most interesting, and some points are worth reporting.

Evidence of Infection in Diarrhœa.—If the unequal incidence in certain *areas* suggests infection, this is emphasised by its behaviour in certain *houses*.

In one small road (A) the deaths in successive years were 1, 2, 3, 0, 2, 2, 0, 0, 0, 0; the houses in which the 3 deaths occurred were Nos. 21, 22 and 23: in another year there were 2 deaths only, in Nos. 24 and 27.

In road (B) in one year 2 deaths only occurred, at Nos. 55 and 57: in road (C) the deaths were 3, 2, 0, 0, 1, 0, 0, 0, 0, and the 3 deaths in the same year were at Nos. 1, 3 and 4. These are merely examples of many similar occurrences.

The investigation of *cases* should afford better evidence than deaths, since, if infection plays any part, it is probable that slight and non-fatal cases may give rise to more severe ones.

In 1909 there were 7 cases in road (C) of 132 houses; 3 were in one house, on August 10th, August 19th (same family) and on September 20th (different family).

In 1910 in the same road (C) out of 13 cases, 4 were in one house (1) on August 13th, (2) August 15th (second family), September 13th (No. 2 had a second attack), and September 22nd (No. 1 had a second attack). In another street (E) 11 cases occurred among 128 houses: 5 of these were in 2 houses.

In a street of 50 houses there were 6 cases in 1911: 3 of these were in one house on July 8th, July 28th, August 17th, and one next door on August 29th.

Had these been Scarlet Fever or Diphtheria instead of Diarrhœa, there would be no question about the infectious nature of the disease: if Enteric Fever, which is the most closely allied to Diarrhœa, one would say that there was evidence that infection had a large share in the spread, if it was not the chief factor. Enteric Fever, like Diarrhœa, appears to be due to the ingestion of the specific germs with food or drink: but in epidemics, and in towns where it is endemic, many cases are known to arise by what is called “direct or personal infection.” It must be admitted that considering the small area and few cases to investigate in Hove, there is good evidence that Diarrhœa arises in the same way.

Is it possible that this disease is truly an infectious disease, and that one case always arises from a previous one, the infection becoming most active in hot weather, as that of Influenza does in the cold? If so, there should be some evidence of its occurrence at other seasons. I shall show that this is not wanting.

Going back to 1890, in that year there were 5 deaths, all in August and October; in 1891, only two deaths in September; but in after years deaths have often occurred in colder months, the earliest dates in each year being—

1892—April 12	1902—Feb., March, April 29.
1893—May 12	1903—Feb.
1894—Jan. 15, May 27	1904—May 26.
1895—Feb. 16, Mar. 29.	1905—Jan. 30.
1896—None before July 18.	1906—June 5.
1897—Feb. 23, May 20.	1907—May 20.
1898—Jan. 22, 29, March 26.	1908—July 21.
1899—Feb. 25, Mar. 5.	1909—July 31.
1900—Mar. 11, May 31.	1910—Aug. 21.
1901—Jan. 11, May 23.	1911—Aug. 4.

Here is the kind of thing we were looking for; sufficient to show that this disease occurs even in winter, though it rarely proves fatal then. This is more clearly seen if some years are followed continuously, *e.g.*, deaths occurred in (1896) November 8th, 21st, December 4th, February 23rd (1897), May 20, November 21st, December 11th, January 22nd (1898), January 29th, March 26th.

The Health Visitor's notes for the present winter 1911-12 record cases of Diarrhœa (not fatal) in 10 houses from November to the end of January : 5 beginning in November, 2 in December and 3 in January : there does not appear to be any association of these one with another.

I have carefully searched the registers to see if the winter deaths occurred in the same houses in which there were deaths in the previous or following summer, but this was not so, indeed it is hardly likely to be so, for it is only small babies who are affected fatally.

Admitting that Diarrhœa may arise by infection from a previous case, how is it conveyed ? The facts already mentioned as to the houses affected in some streets, suggest the direct association of neighbours, who would naturally assist one another in the event of the baby's illness ; and might carry back the infection to their own families. It is well known that this disease often affects all the members of a household : in one instance last year the baby was the last of the family to fall ill.

Relation of Diarrhœa to Flies.—Several observers have attributed much harm to flies, alleging that these insects carry germs from the refuse on which they feed to the baby's food and drink. I have for many years endeavoured to trace some connection between flies and Diarrhœa, but have always felt that some facts were wanting, especially the dates when attacks began.

Comparison of times when deaths occurred and flies were abundant led to no definite conclusion, *e.g.* :—

In 1903 the first death occurred before flies came, though most were when flies were abundant.

In 1904 the first death was 22 days after my entry "flies abundant."

In 1905 deaths occurred before flies.

In 1906 the first death was 7 days after flies ; more occurred later.

In 1907 (a cool wet summer) the first death was 1 month after flies were common ; flies being only abundant at the end of September when diarrhœa deaths had ceased and did not recur.

In 1908 there were few deaths, the first occurred with the advent of flies, and more as flies abounded.

During the last three years, with the dates of onset of attacks, the relation of flies becomes clearer : for in each of these years the *cases* of Diarrhœa have begun at the same date or within a few days of the entry “ flies abundant ” ; and in 1911 this association has been strengthened by the excessive incidence of cases in the streets to west of Tamworth Road, without any increase in those further east : it was in the western district that flies were a nuisance.

This does not prove the relation of flies to Diarrhœa : but it is, to my mind, very strong evidence of the only sort which is available ; the probable explanation being not that flies carry the infection from their breeding places, but from one case of illness to the food of another, as is known to occur with Enteric Fever.

Relation of Diarrhœa to Temperature.—The relation of Diarrhœa to temperature has been carefully followed especially for the last three years.

Considering (1st) the daily *maximum* temperatures :—

In 1909 there was no real rise above 65° until August 5th and then for 14 days only, the thermometer reaching 80° for 3 days : nearly all the cases of Diarrhœa occurred in this fortnight and the week following : after this, fresh cases ceased.

In 1910 there was no prolonged rise over 65° , the maximum being 73° : cases occurred as the highest temperatures were reached, and continued to occur for some weeks in spite of low maxima.

In 1911 a temperature of 79° was reached on July 7th, and from then on to September 16th the maxima were always over 65° , the highest being 92° on August 12th : frequent cases began only when maxima over 75° had been maintained for 3 weeks without any higher figure being reached : at the highest of all more cases occurred. In September, when maxima over 74° were recorded on 12 successive days, only one fresh case was reported.

The influence of the maximum temperature may be considered as not a direct one.

(2nd) the *Temperature of the Earth*.—The thermometer, at a depth of 4ft. below the surface of the ground rises gradually as the year advances, and its rise is not affected by small daily variations of the atmosphere. In comparing the readings of the 4ft. thermometer and the onset of diarrhoea cases, we have two reliable data to deal with.

In 1909 the first two cases began when the thermometer registered 56° and 57° : cases were more numerous as it reached 60° , which was its maximum, with a few fresh ones at intervals, until the thermometer on its downward grade marked 58° .

In 1910 the first case was recorded when the thermometer stood at 58° , at which it remained for five weeks: as it rose to 59° many more occurred: 60° was only reached for one week, when more cases began, fresh ones succeeding until the thermometer fell to 57° .

In 1911 the first case began in June, the thermometer being 55° : no more were known until it stood at 58° : with a rapid rise to 61° several occurred: the thermometer continued to rise to 65° with many more cases: with a sudden fall to 64° the cases ceased abruptly, and only five were reported during the rest of the summer.

If previous years are examined the most frequent cases and the deaths are found about 2 weeks after a temperature of 59° is reached by the rising thermometer, which agrees with the last 3 years.

If there is any association between the Diarrhœa and earth temperature, the height at which cases begin in Hove is 58° - 59° : a temperature higher than this produces still more cases as long as the thermometer is rising : as soon as it begins to fall, even if it remains well over 59° , the Diarrhœa lessens.

The two factors, therefore, which appear to bear some relation to the incidence of Diarrhœa, are the rise of the ground temperature over 58° and the prevalence of flies, which are associated with one another ; for the maintenance of a steady high temperature favours the development and multiplication of flies, and is also more trying to small children than an occasional hot day with intervals of relief.

Preventive Measures against Diarrhœa.—The Local Government Board, in their circular on this subject, suggested that action should be taken—

- (1) To give regular advice on the feeding and management of children. This is done by the Health Visitor.
- (2) By attending to accumulations of refuse, manure, etc. The refuse from houses was removed regularly twice a week from June to September : the inspectors attended specially to manure heaps and other accumulations : scavenging has been carefully carried out in all parts of the Town at least 3 times a week through the summer.
- (3) By ascertaining where Diarrhœa is prevalent and giving advice with a view to prevention and treatment.

The Health Visitor, as already stated, made special investigation of these cases, and spent almost her whole time

day after day, in advising parents respecting children who were ailing. Thus all of the Board's recommendations were carefully attended to, with a result which can only be a source of gratification, for in this summer of exceptional heat and dryness the deaths from Diarrhœa have not exceeded what, a few years ago, was the average for each year.

It is noteworthy that in 1907, and all years since, Diarrhœa has been on the decrease in this Borough. I have no doubt that the efficient scavenging of the streets has assisted to produce this result: the ministrations of the Health Visitor also have been of great service in a different direction, dealing with the individual houses, and strengthening children to resist the disease; to the good work which she is doing is, I believe, due to a large extent the diminution of infantile Diarrhœa during recent years.

Nevertheless, there is one thing needed, and this year has brought it home forcibly: there can be no question that flies have been a great nuisance, especially in the western parts of the Borough; and, as I have shown, there is strong evidence that they have played a part in the spread of Epidemic Diarrhœa.

In all other respects Hove can claim to have done its duty for the children's health, and if effectual means can be taken to limit the number of flies, even better results may be expected.

Deaths from Tuberculosis.—These numbered 43, which is less than the average of recent years: in 36 the lungs were the chief seat of disease; 5 were meningeal and 2 general.

These figures are exclusive of visitors; that is of those who were not residents here, but include some who were already ill on coming to Hove. The death rate from this cause is higher than in the previous 4 years.

PHTHISIS DEATH-RATE PER 1,000 LIVING.

Year.	Deaths.	Death Rate.	Deaths of Visitors.	Death-Rate—not counting Visitors.
1899	25	0·71	—	—
1900	43	1·2	—	—
1901	47	1·3	12	0·95
1902	42	1·1	6	0·95
1903	35	0·91	5	0·78
1904	36	0·91	10	0·66
1905	41	1·02	12	0·72
1906	49	1·19	7	1·02
1907	31	0·74	8	0·54
1908	46	1·07	10	0·84
1909	37	0·85	7	0·68
1910	33	0·74	12	0·47
1911	36	—	—	0·85

Infantile Mortality.—The deaths under 1 year of age numbered 66, equal to 101 deaths per thousand births, which is well below the average of Hove: Epidemic Diarrhœa was the cause of 21 deaths (equal to 32 per 1,000 births). The chief other causes were Whooping Cough 5, Prematurity 14, Debility 3, Bronchitis and Pneumonia 9.

The following table allows a comparison to be made with previous years :—

Causes of Death under 1 year of age.

Year.	Total.	Congenital.	Debility, &c.	Enteritis.	Diarrhœa.	Whooping Cough.	Measles.	Diphtheria.	Tubercle.	Bronchitis and Pneumonia.	Accident.	Others.
1902	72	12	11	2	23	2	—	—	2	11	2	7
1903	59	12	14	1	11	4	—	—	3	7	4	3
1904	91	13	23	1	30	—	3	1	3	13	1	3
1905	90	21	18	4	24	4	—	—	—	9	1	9
1906	77	15	10	—	21	3	—	—	4	14	2	8
1907	74	19	10	3	7	1	5	—	2	18	1	8
1908	59	16	12	5	6	2	1	—	2	6	—	9
1909	75	32	8	5	5	5	—	—	1	13	1	5
1910	57	10	10	4	8	3	2	—	5	7	—	8
1911	66	15	4	7	14	5	1	—	2	9	2	7

The Chief Medical Officer of the Local Government Board in a recent report on Infantile Mortality suggested that it would be profitable to compare the death rates under 1 year with those between 1 and 5 years for a series of years, and also to take the actual births and follow the children through one year after another in order to see how many survived at each age.

Following out this suggestion I have tabulated the deaths between 1 and 5 for 10 years, and placed them side by side with those under 1 year :—

Causes of Death under 1 year, and between 1 and 5 years.

	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	TOTALS.
Scarlet Fever -	1 —	— —	— —	— —	— —	— —	— —	4 —	— —	— —	5 —
Diphtheria -	1 —	1 —	— 1	3 —	1 —	1 —	1 —	5 —	— —	2 —	15 1
Whooping Cough -	1 2	1 4	1 —	7 4	2 3	6 1	— 2	4 5	3 3	3 5	28 29
Measles -	2 —	— —	3 3	— —	2 —	9 5	4 1	— —	5 2	1 1	26 12
Influenza -	— —	— —	2 —	— —	— —	— —	1 —	4 —	1 —	— —	8 —
Diarrhoea and Enteritis	6 25	6 12	2 31	2 28	2 21	— 10	— 11	— 10	3 12	3 21	24 181
Tuberculosis -	6 2	2 3	7 3	3 —	6 4	7 2	5 2	4 1	1 5	3 2	35 24
Bronchitis and Pneumonia	5 11	6 7	7 13	7 9	3 14	9 18	5 6	3 13	3 7	5 9	53 107
Violence -	4 2	1 4	— 1	1 1	— 2	1 1	1 —	— 1	1 —	1 2	10 14
Developmental-	— 11	2 14	— 23	5 18	1 10	3 10	1 12	3 8	2 10	— 4	17 120
Prematurity and Congenital	— 12	— 12	— 13	— 21	— 15	— 19	— 16	— 32	— 10	— 15	— 165
Other Causes -	5 7	2 3	4 3	3 9	1 8	3 8	2 9	2 5	3 8	5 7	30 67

The heavy figures denote deaths under 1 year.

Total deaths under 1 year, 720 : between 1 and 5 years, 260.

It will be observed that Tuberculosis and the common infectious diseases (except Whooping Cough) take a larger part after the first year, while under that age Diarrhœa and developmental diseases are most fatal, Bronchitis and Pneumonia being frequent in both groups.

This is brought out better by expressing the causes of death in their relation to all deaths at those age periods, and still better by omitting prematurity and other congenital defects which are usually fatal during the first year of life.

Deaths under 1, and between 1 and 5 : percentage due to each cause in 10 years.

Cause.	Under 1.	Between 1 and 5.	Under 1, omitting prematurity, etc.
Scarlet Fever - - -	—	1·9	—
Diphtheria - - -	0·15	5·8	0·23
Whooping Cough - - -	4·0	10·8	6·7
Measles - - -	1·7	10·0	2·8
Influenza - - -	—	3·0	—
Diarrhœa and Enteritis -	24·9	9·2	41·4
Tuberculosis - - -	3·5	16·9	5·8
Bronchitis and Pneumonia	14·9	20·4	24·7
Violence - - -	2·0	3·8	3·2
Developmental - - -	16·7	6·6	—
Prematurity - - -	23·1	—	—
Other Causes - - -	9·2	11·6	15·2

The deaths at both age groups show great variations from year to year, not only in the causes, but in the totals, as shown below :—

Death-rates under 1 and between 1 and 5 ; for 10 years.

	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Mortality under 1 year per 1,000 births	109	88	132	133	114	116	94	118	90	101
Mortality 1–5 years per 1,000 living	10·0	9·6	12·6	8·7	16·9	7·8	13·3	11·3	9·1	13·3

The variations at ages 1 to 5 years are more extreme, probably because one third of those under 1 year die from congenital causes : there is not much to suggest that the influence of the year (climate, etc.) affects the death rates of the two groups ; the closest

similarity is obtained by comparing the mortality under 1 in any year with that of the older group two years later, which, if it means anything, points to the weakly survivors of a bad year dying two to three years later.

In the attempt to follow the lives of children from year to year, Hove has one disadvantage, viz., the frequent movements of the residents: all estimates as to the deaths of children are liable to error because many born here go to reside elsewhere and vice versa.

In the case of those babies born in 1909 and 1910 I have been able, through the Health Visitor's entries to identify nearly all of those who have died, and give the results up to date:—

	1909	1910
Births of Hove babies registered ..	635	653
Died under 1 month	33	15
Died between 1 month and 1 year ..	36	39
Died between 1 year and 2 years ..	15	—

The causes of death of these babies may be compared thus:—

CAUSES.	Died under 1 month.		Died between 1 and 12 months.		Died 1-2 years.
	Born 1909.	Born 1910.	Born 1909.	Born 1910.	Born 1909.
Marasmus, etc.	—	3	4	2	1
Diarrhœa, etc.	—	1	8	13	1
Whooping Cough	—	—	1	6	3
Measles	—	—	—	3	2
Influenza	—	—	4	—	—
Bronchitis and Pneumonia	2	—	10	6	3
Tuberculosis	—	—	4	3	1
Convulsions	—	—	2	2	3
Accident	1	—	—	—	1
Prematurity	17	8	—	1	—
Congenital defects	13	1	—	—	—
Syphilis	—	—	—	3	—
Other causes	—	2	3	—	—
TOTAL	33	15	36	39	15

The figures for two years only can be given at present: but it is noteworthy that of the 1910 babies fewer died before reaching 1 month, and more between this age and 12 months: this might suggest an unnecessary survival of the weakly for a few months,

but if the causes are examined this will not hold good, for the later deaths are due to Diarrhœa, Whooping Cough and Measles, the latter two being epidemic diseases occurring at uncertain intervals and happening to fall first in this year ; while the Diarrhœa season of 1911 accounts for the excess there.

Senile Mortality.—The ratio of deaths over 60 years of age to all deaths was just over 50 per cent. : there were not so many over 90 as in some years, and none over 100, the oldest being 98.

	Males	Females	Total
Number of deaths among persons between 60 and 70	38	52	90
Number of deaths among persons between 60 and 80	39	69	108
Number of deaths among persons between 80 and 90	31	42	73
Number of deaths among persons over 90 ..	2	4	6
	<hr/> 110	<hr/> 167	<hr/> 277

Meteorology.—The year 1911 is likely to be remembered, not only for the high maximal temperatures of the summer, but for its prolonged freedom from rainfall : the effect of this on children's health has been discussed on page 32.

RAIN, SUN & TEMPERATURE—1911.

	Total rain in inches	Maximum rain in 24 hours	Days without rain	Sunshine	Highest temp'ture reached.	Average mean temp'ture.
January ...	1.52	0.50	15	64.88	50°	38.5
February ...	1.26	0.31	16	76.98	54°	40.9
March ...	2.21	0.97	14	123.14	61°	42.8
April ...	1.70	0.71	16	171.12	58°	43.7
May ...	0.82	0.25	25	235.03	77°	54.4
June ...	2.23	1.00	20	236.54	79°	60.3
July ...	0.45	0.36	27	359.08	85°	65.1
August ...	0.35	0.13	24	259.54	92°	66.7
September ...	1.67	0.38	22	240.90	84°	60.2
October ...	4.73	0.80	16	114.44	70°	52.4
November ...	6.01	1.21	10	61.57	58°	44.6
December ...	6.32	0.62	4	40.69	53°	45.1
TOTAL	29.27	—	209	1,983.91	—	—

The longest periods without any rain were from May 17th to June 15th (30 days), from July 2nd to 23rd (22 days) and from August 2nd to 19th (18 days). There were 17 successive days of rain in December (12th to 28th).

The official tables, required by the Local Government Board, follow, and complete this report, which is the thirteenth I have presented to you.

I have the honour to remain, Gentlemen,

Your obedient Servant,

AUGUSTINE GRIFFITH.

Town Hall, Hove,

March 4th, 1912.



Table I.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1911 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.		
		Un-corrected Number.	Nett.		Number.	Rate.	of Non-Registered Residents in the District.	of Residents registered in the District.	Under 1 Year of Age		At all ages.
			Number.	Rate.					Number.	Rate per 1,000 Nett Births	
1	2	3	4	5	6	7	8	9	10	11	12 13
1906	39,394	672	—	17·0	440	11·1	—	69	77	114	—
1907	39,963	633	—	15·8	518	12·9	48	59	74	116	529 13·2
1908	40,531	627	—	15·4	467	11·5	44	80	59	94	503 12·4
1909	41,127	635	—	15·4	568	13·8	50	82	75	118	600 14·7
1910	41,721	620	630	15·0	459	10·9	41	85	57	90	503 12·0
1911	42,324	643	653	15·4	510	12·5	52	88	66	101	546 12·9

Table III.—CAUSES OF, AND AGES AT DEATH DURING YEAR 1911.

CAUSES OF DEATH.			Net Deaths at the subjoined ages of "Residents," whether occurring within or without the District.								Total Deaths in Public Institutions in the District.
			All ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15	15 and under 25	25 and under 45	45 and under 65		65 and upwards
1	2	3	4	5	6	7	8	9	10	11	
All Causes } Certified ...	545	—	—	—	—	—	—	—	—	—	
	1	—	—	—	—	—	1	—	—	—	
Measles ...	3	—	—	2	—	—	—	1	—	—	
Whooping-cough ...	9	6	1	2	—	—	—	—	—	—	
Diphtheria and Croup ...	3	—	—	2	1	—	—	—	—	—	
Influenza ...	8	—	—	—	—	—	—	1	7	—	
Erysipelas ...	1	—	—	—	—	—	1	—	—	—	
Phthisis (Pulmonary tuberculosis) ...	36	1	—	—	—	8	15	9	3	—	
Tuberculous Meningitis ...	5	1	1	3	—	—	—	—	—	—	
Other tuberculous diseases	2	—	—	—	1	—	—	—	1	—	
Rheumatic Fever...	2	—	—	—	1	—	—	—	1	—	
Cancer, malignant disease	84	—	—	—	—	—	4	37	43	1	
Bronchitis ...	24	3	1	1	—	—	1	—	18	1	
Broncho-Pneumonia ...	14	5	3	1	—	—	—	1	4	—	
Pneumonia (all other forms)	20	1	—	1	—	1	4	7	6	—	
Other diseases of respiratory organs ...	3	—	—	—	—	—	—	1	2	—	
Diarrhoea and Enteritis ...	28	21	2	1	—	—	—	—	4	—	
Appendicitis and Typhlitis	3	—	—	—	—	—	—	2	1	—	
Alcoholism ...	5	—	—	—	—	—	2	1	2	—	
Cirrhosis of liver ...	6	—	—	—	—	—	—	4	2	—	
Nephritis & Bright's disease	25	—	—	—	—	2	1	10	12	—	
Other accidents and diseases of pregnancy and parturition ...	1	1	—	—	—	—	—	—	—	—	
Congenital debility and malformation, including premature birth...	21	21	—	—	—	—	—	—	—	—	
Violent deaths, excluding suicides ...	13	2	—	1	—	1	1	5	3	7	
Suicides ...	6	—	—	—	—	—	2	3	1	2	
Old age ...	41	—	—	—	—	—	—	—	41	6	
Other defined diseases ...	155	3	1	2	2	3	18	50	76	4	
Diseases ill-defined or unknown ...	28	1	1	1	—	—	2	7	16	3	
All causes ...	546	66	10	17	5	15	51	139	243	24	

Table IV.—INFANTILE MORTALITY DURING THE YEAR 1911.

Nett Deaths from stated Causes at various ages under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under One Year.
ALL CAUSES—Certified	...	13	3	5	3	24	11	13	13	5	66
Measles	...	—	—	—	—	—	—	—	1	—	1
Whooping Cough	...	—	—	—	—	—	—	—	2	—	5
Diarrhoea	...	—	—	—	—	—	3	6	4	1	14
Enteritis	...	—	—	1	—	1	1	2	1	2	7
Tuberculous Meningitis	...	—	—	—	—	—	—	1	—	—	1
Other Tuberculous Diseases	...	—	—	—	—	—	—	—	1	—	1
Congenital Malformations	...	1	2	—	—	1	—	—	—	—	1
Premature Birth	...	8	1	2	2	14	—	—	—	—	14
Atrophy, Debility and Marasmus	...	1	1	1	—	3	—	—	—	—	3
Atelectasis	...	1	—	—	—	1	—	—	—	—	1
Injury at Birth	...	1	—	—	—	1	1	—	—	—	1
Syphilis	...	—	—	—	—	—	—	—	—	—	1
Meningitis (not Tuberculous)	...	—	—	—	—	—	1	—	1	—	1
Convulsions	...	—	—	—	—	—	—	—	—	—	1
Gastritis	...	—	—	—	—	—	1	—	—	—	1
Bronchitis	...	—	—	—	—	—	1	—	1	—	3
Pneumonia (all forms)	...	—	—	—	—	—	2	1	2	1	6
Suffocation, overlying	...	—	—	1	—	—	1	—	—	—	1
Other Causes	...	1	—	—	1	3	—	—	—	—	3

Births in the year: legitimate, 618; illegitimate, 35.

Deaths in the year of legitimate infants, 61; illegitimate infants, 5.

